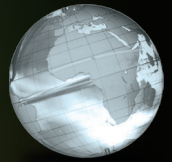


GLOBAL
EDITION



International Finance

Theory and Policy

12th Edition

Paul R. Krugman • Maurice Obstfeld • Marc J. Melitz



International Finance

| THEORY & POLICY |

TWELFTH EDITION

GLOBAL EDITION

Paul R. Krugman

Graduate Center of the City University of New York

Maurice Obstfeld

University of California, Berkeley

Marc J. Melitz

Harvard University



Pearson

Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Dubai • Singapore • Hong Kong
Tokyo • Seoul • Taipei • New Delhi • Cape Town • São Paulo • Mexico City • Madrid • Amsterdam • Munich • Paris • Milan

International Finance: Theory and Policy, Global Edition

Table of Contents

Cover

Title Page

Copyright

Brief Contents

Contents

Preface

Chapter 1. Introduction

What Is International Economics About?

The Gains from Trade

The Pattern of Trade

How Much Trade?

Balance of Payments

Exchange Rate Determination

International Policy Coordination

The International Capital Market

International Economics: Trade and Money

Part 1: Exchange Rates and Open-Economy Macroeconomics

Chapter 2. National Income Accounting and the Balance of Payments

The National Income Accounts

National Product and National Income

Capital Depreciation and International Transfers

Gross Domestic Product

National Income Accounting for an Open Economy

Consumption

Investment

Government Purchases

The National Income Identity for an Open Economy

Table of Contents

An Imaginary Open Economy

The Current Account and Foreign Indebtedness

Saving and the Current Account

Private and Government Saving

Box: The Mystery of the Missing Deficit

The Balance of Payments Accounts

Examples of Paired Transactions

The Fundamental Balance of Payments Identity

The Current Account, Once Again

The Capital Account

The Financial Account

Statistical Discrepancy

Box: Multinationals Profit Shifting and Irelands Volatile GDP

Official Reserve Transactions

Case Study: The Assets and Liabilities of the Worlds Biggest Debtor

Summary

Chapter 3. Exchange Rates and the Foreign Exchange Market: An Asset Approach

Exchange Rates and International Transactions

Domestic and Foreign Prices

Exchange Rates and Relative Prices

The Foreign Exchange Market

The Actors

Characteristics of the Market

Spot Rates and Forward Rates

Foreign Exchange Swaps

Futures and Options

The Demand for Foreign Currency Assets

Assets and Asset Returns

Risk and Liquidity

Interest Rates

Exchange Rates and Asset Returns

A Simple Rule

Return, Risk, and Liquidity in the Foreign Exchange Market

Equilibrium in the Foreign Exchange Market

Interest Parity: The Basic Equilibrium Condition

Table of Contents

How Changes in the Current Exchange Rate Affect Expected Returns

The Equilibrium Exchange Rate

Interest Rates, Expectations, and Equilibrium

The Effect of Changing Interest Rates on the Current Exchange Rate

The Effect of Changing Expectations on the Current Exchange Rate

Case Study: What Explains the Carry Trade?

Forward Exchange Rates and Covered Interest Parity

Summary

Chapter 4. Money, Interest Rates, and Exchange Rates

Money Defined: A Brief Review

Money as a Medium of Exchange

Money as a Unit of Account

Money as a Store of Value

What Is Money?

How the Money Supply Is Determined

The Demand for Money by Individuals

Expected Return

Risk

Liquidity

Aggregate Money Demand

The Equilibrium Interest Rate: The Interaction of Money Supply and Demand

Equilibrium in the Money Market

Interest Rates and the Money Supply

Output and the Interest Rate

The Money Supply and the Exchange Rate in the Short Run

Linking Money, the Interest Rate, and the Exchange Rate

U.S. Money Supply and the Dollar/Euro Exchange Rate

Europe's Money Supply and the Dollar/Euro Exchange Rate

Money, the Price Level, and the Exchange Rate in the Long Run

Money and Money Prices

The Long-Run Effects of Money Supply Changes

Empirical Evidence on Money Supplies and Price Levels

Money and the Exchange Rate in the Long Run

Inflation and Exchange Rate Dynamics

Short-Run Price Rigidity versus Long-Run Price Flexibility

Box: Money Supply Growth and Hyperinflation in Zimbabwe

Table of Contents

Permanent Money Supply Changes and the Exchange Rate

Exchange Rate Overshooting

Case Study: Inflation Targeting and Exchange Rate in Emerging Countries

Summary

Chapter 5. Price Levels and the Exchange Rate in the Long Run

The Law of One Price

Purchasing Power Parity

The Relationship between PPP and the Law of One Price

Absolute PPP and Relative PPP

A Long-Run Exchange Rate Model Based on PPP

The Fundamental Equation of the Monetary Approach

Ongoing Inflation, Interest Parity, and PPP

The Fisher Effect

Empirical Evidence on PPP and the Law of One Price

Explaining the Problems with PPP

Trade Barriers and Nontradables

Departures from Free Competition

Differences in Consumption Patterns and Price Level Measurement

Box: Measuring And Comparing Countries Wealth Worldwide: The International Comparison Program (ICP)

PPP in the Short Run and in the Long Run

Case Study: Why Price Levels Are Lower in Poorer Countries

Beyond Purchasing Power Parity: A General Model of Long-Run Exchange Rates

The Real Exchange Rate

Demand, Supply, and the Long-Run Real Exchange Rate

Box: Sticky Prices and the Law of One Price: Evidence from Scandinavian Duty-Free Shops

Nominal and Real Exchange Rates in Long-Run Equilibrium

International Interest Rate Differences and the Real Exchange Rate

Real Interest Parity

Summary

Appendix to chapter 5: The Fisher Effect, the Interest Rate, and the Exchange Rate under the Flexible-Price Monetary Approach

Chapter 6. Output and the Exchange Rate in the Short Run

Determinants of Aggregate Demand in an Open Economy

Table of Contents

Determinants of Consumption Demand

Determinants of the Current Account

How Real Exchange Rate Changes Affect the Current Account

How Disposable Income Changes Affect the Current Account

The Equation of Aggregate Demand

The Real Exchange Rate and Aggregate Demand

Real Income and Aggregate Demand

How Output Is Determined in the Short Run

Output Market Equilibrium in the Short Run: The DD Schedule

Output, the Exchange Rate, and Output Market Equilibrium

Deriving the DD Schedule

Factors That Shift the DD Schedule

Asset Market Equilibrium in the Short Run: The AA Schedule

Output, the Exchange Rate, and Asset Market Equilibrium

Deriving the AA Schedule

Factors That Shift the AA Schedule

Short-Run Equilibrium for an Open Economy: Putting the DD and AA Schedules Together

Temporary Changes in Monetary and Fiscal Policy

Monetary Policy

Fiscal Policy

Policies to Maintain Full Employment

Inflation Bias and Other Problems of Policy Formulation

Permanent Shifts in Monetary and Fiscal Policy

A Permanent Increase in the Money Supply

Adjustment to a Permanent Increase in the Money Supply

A Permanent Fiscal Expansion

Macroeconomic Policies and the Current Account

Gradual Trade Flow Adjustment and Current Account Dynamics

The J-Curve

Exchange Rate Pass-Through and Inflation

Global Value Chains and Exchange Rate Effects on Export and Import Prices

The Current Account, Wealth, and Exchange Rate Dynamics

Box: Understanding Pass-Through to Import and Export Prices

The Liquidity Trap

Case Study: How Big Is the Government Spending Multiplier?

Summary

Table of Contents

Appendix 1 to chapter 6: Intertemporal Trade and Consumption Demand

Appendix 2 to chapter 6: The Marshall-Lerner Condition and Empirical Estimates of Trade Elasticities

Appendix 3 to chapter 6: The IS-LM Model and the DD-AA Model

Chapter 7. Fixed Exchange Rates and Foreign Exchange Intervention

Why Study Fixed Exchange Rates?

Central Bank Intervention and the Money Supply

The Central Bank Balance Sheet and the Money Supply

Foreign Exchange Intervention and the Money Supply

Sterilization

The Balance of Payments and the Money Supply

How the Central Bank Fixes the Exchange Rate

Foreign Exchange Market Equilibrium under a Fixed Exchange Rate

Money Market Equilibrium under a Fixed Exchange Rate

A Diagrammatic Analysis

Stabilization Policies with a Fixed Exchange Rate

Monetary Policy

Fiscal Policy

Changes in the Exchange Rate

Adjustment to Fiscal Policy and Exchange Rate Changes

Balance of Payments Crises and Capital Flight

Managed Floating and Sterilized Intervention

Perfect Asset Substitutability and the Ineffectiveness of Sterilized Intervention

Case Study: Can Markets Attack a Strong Currency? The Case of Switzerland, 2011-2015

Foreign Exchange Market Equilibrium under Imperfect Asset Substitutability

The Effects of Sterilized Intervention with Imperfect Asset Substitutability

Evidence on the Effects of Sterilized Intervention

Reserve Currencies in the World Monetary System

The Mechanics of a Reserve Currency Standard

The Asymmetric Position of the Reserve Center

The Gold Standard

The Mechanics of a Gold Standard

Symmetric Monetary Adjustment under a Gold Standard

Benefits and Drawbacks of the Gold Standard

The Bimetallic Standard

Table of Contents

The Gold Exchange Standard

Case Study: The Demand for International Reserves

Summary

Appendix 1 to chapter 7: Equilibrium in the Foreign Exchange Market with Imperfect Asset

Substitutability

Demand

Supply

Equilibrium

Appendix 2 to chapter 7: The Timing of Balance of Payments Crises

Appendix 3 to chapter 7: The Monetary Approach to the Balance of Payments

Part 2: International Macroeconomic Policy

Chapter 8. International Monetary Systems: A Historical Overview

Macroeconomic Policy Goals in an Open Economy

Internal Balance: Full Employment and Price Level Stability

External Balance: The Optimal Level of the Current Account

Box: Can a Country Borrow Forever? The Case of New Zealand

Classifying Monetary Systems: The Open-Economy Monetary Trilemma

International Macroeconomic Policy under the Gold Standard, 1870-1914

Origins of the Gold Standard

External Balance under the Gold Standard

The Price-Specie-Flow Mechanism

The Gold Standard Rules of the Game: Myth and Reality

Internal Balance under the Gold Standard

Case Study: The Political Economy of Exchange Rate Regimes: Conflict over
Americas Monetary Standard during the 1890s

The Interwar Years, 1918-1939

The Fleeting Return to Gold

International Economic Disintegration

Case Study: The International Gold Standard and the Great Depression

The Bretton Woods System and the International Monetary Fund

Goals and Structure of the IMF

Convertibility and the Expansion of Private Financial Flows

Speculative Capital Flows and Crises

Analyzing Policy Options for Reaching Internal and External Balance

Maintaining Internal Balance

Table of Contents

Maintaining External Balance

Expenditure-Changing and Expenditure-Switching Policies

The External Balance Problem of the United States under Bretton Woods

Case Study: The End of Bretton Woods, Worldwide Inflation, and the Transition to Floating Rates

The Mechanics of Imported Inflation

Assessment

The Case for Floating Exchange Rates

Monetary Policy Autonomy

Symmetry

Exchange Rates as Automatic Stabilizers

Exchange Rates and External Balance

Case Study: The First Years of Floating Rates, 1973-1990

Macroeconomic Interdependence under a Floating Rate

Case Study: Transformation and Crisis in the World Economy

Box: The Thorny Problem of Currency Manipulation

Case Study: The Dangers of Deflation

What Has Been Learned Since 1973?

Monetary Policy Autonomy

Symmetry

The Exchange Rate as an Automatic Stabilizer

External Balance

The Problem of Policy Coordination

Are Fixed Exchange Rates Even an Option for Most Countries?

Summary

Appendix to chapter 8: International Policy Coordination Failures

Chapter 9. Financial Globalization: Opportunity and Crisis

The International Capital Market and the Gains from Trade

Three Types of Gain from Trade

Risk Aversion

Portfolio Diversification as a Motive for International Asset Trade

The Menu of International Assets: Debt versus Equity

International Banking and the International Capital Market

The Structure of the International Capital Market

Offshore Banking and Offshore Currency Trading

The Shadow Banking System

Table of Contents

Banking and Financial Fragil

The Problem of Bank Failure

Government Safeguards against Financial Instability

Moral Hazard and the Problem of Too Big to Fail

Box: Does the IMF Create Moral Hazard?

The Challenge of Regulating International Banking

The Financial Trilemma

International Regulatory Cooperation through 2007

Case Study: The Global Financial Crisis of 2007/2009

Box: Foreign Exchange Instability and Central Bank Swap Lines

International Regulatory Initiatives after the Global Financial Crisis

Metrics for International Capital Market Performance

The Extent of International Portfolio Equity Diversification

The Extent of Intertemporal Trade

The Efficiency of International Asset-Price Arbitrage

The Efficiency of the Foreign Exchange Market

Summary

Chapter 10. Optimum Currency Areas and the Euro

How the European Single Currency Evolved

What Has Driven European Monetary Cooperation?

Box: Brexit

The European Monetary System, 1979/1998

German Monetary Dominance and the Credibility Theory of the EMS

Market Integration Initiatives

European Economic and Monetary Union

The Euro and Economic Policy in the Euro Zone

The Maastricht Convergence Criteria and the Stability and Growth Pact

The European Central Bank and the Eurosystem

The Revised Exchange Rate Mechanism

The Theory of Optimum Currency Areas

Economic Integration and the Benefits of a Fixed Exchange Rate Area: The GG Schedule

Economic Integration and the Costs of a Fixed Exchange Rate Area: The LL Schedule

The Decision to Join a Currency Area: Putting the GG and LL Schedules Together

What Is an Optimum Currency Area?

Other Important Considerations

Case Study: Is Europe an Optimum Currency Area?

Table of Contents

The Euro Crisis and the Future of EMU

- Origins of the Crisis
- Self-Fulfilling Government Default and the Doom Loop
- A Broader Crisis and Policy Responses
- ECB Outright Monetary Transactions
- Response to the COVID-19 Pandemic
- The Future of EMU

Summary

Chapter 11. Developing Countries: Growth, Crisis, and Reform

Income, Wealth, and Growth in the World Economy

- The Gap between Rich and Poor
- Has the World Income Gap Narrowed Over Time?
- The Importance of Developing Countries for Global Growth

Structural Features of Developing Countries

Box: The Commodity Super Cycle

Developing-Country Borrowing and Debt

- The Economics of Financial Inflows to Developing Countries
- The Problem of Default
- Alternative Forms of Financial Inflow
- The Problem of Original Sin
- The Debt Crisis of the 1980s
- Reforms, Capital Inflows, and the Return of Crisis

East Asia: Success and Crisis

- The East Asian Economic Miracle

Box: Why Have Developing Countries Accumulated High Levels of International Reserves?

- Asian Weaknesses

Box: What Did East Asia Do Right?

- The Asian Financial Crisis

Lessons of Developing-Country Crises

Reforming the World's Financial Architecture

- Capital Mobility and the Trilemma of the Exchange Rate Regime
- Prophylactic Measures
- Coping with Crisis

Box: Emerging Markets and Global Financial Cycles

Understanding Global Capital Flows and the Global Distribution of Income: Is

Table of Contents

Geography Destiny?

Box: Capital Paradoxes

Summary

Mathematical Postscript

Postscript to Chapter 9: Risk Aversion and International Portfolio Diversification

An Analytical Derivation of the Optimal Portfolio

A Diagrammatic Derivation of the Optimal Portfolio

The Effects of Changing Rates of Return

Merchandise Trade Flows with the United States (in 2018 U.S. dollars)

Gross National Product per Capita (in 2019 U.S. dollars)

Index